

Membrane Arrays

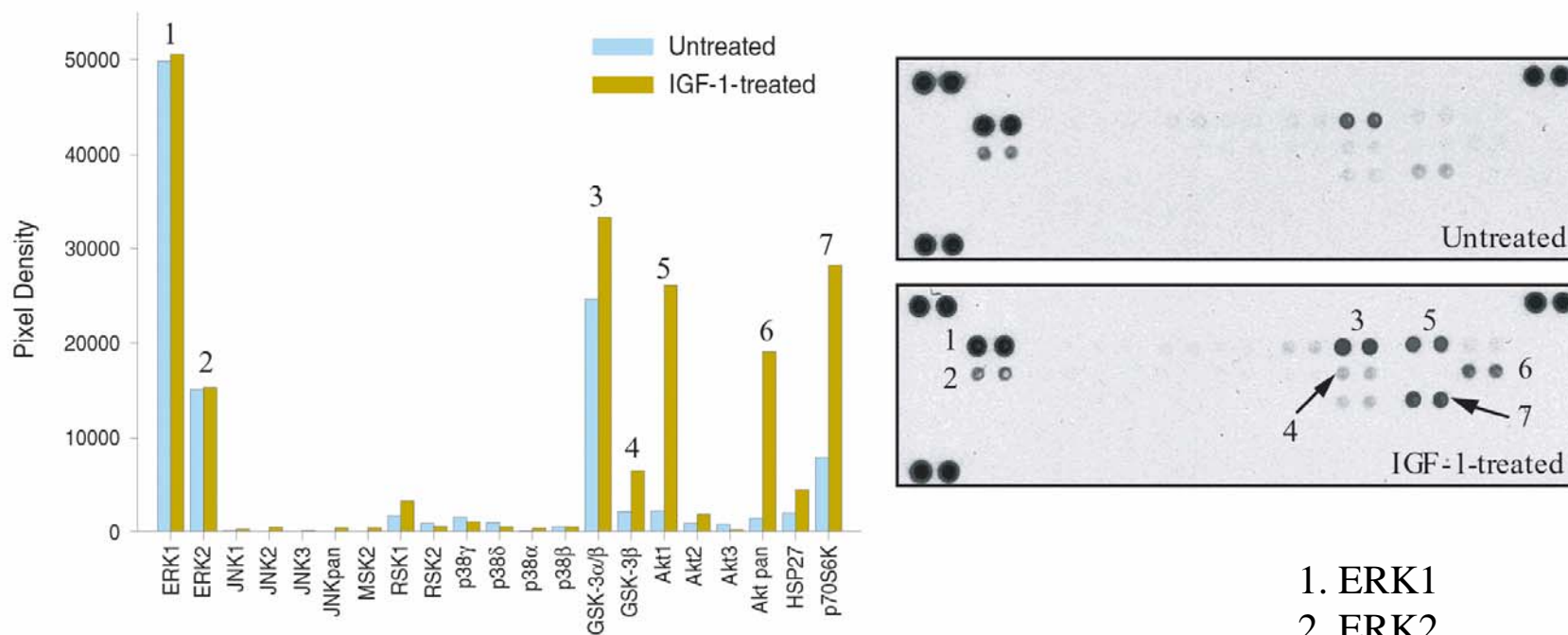


Figure 1. The Human Phospho-MAPK Array (Catalog ARY002) detects multiple phosphorylated kinases in lysates from untreated and treated cells. MCF-7 cells were either untreated or treated with 100 ng/mL of human IGF-1 for 1 hour. 200 µg of lysate was used on each array. Scanned X-ray film images were analyzed for pixel density.

1. ERK1
2. ERK2
3. GSK-3a/b
4. GSK-3b
5. Akt1
6. Akt pan
7. p70 S6 Kinase

Microparticle Multiplexing

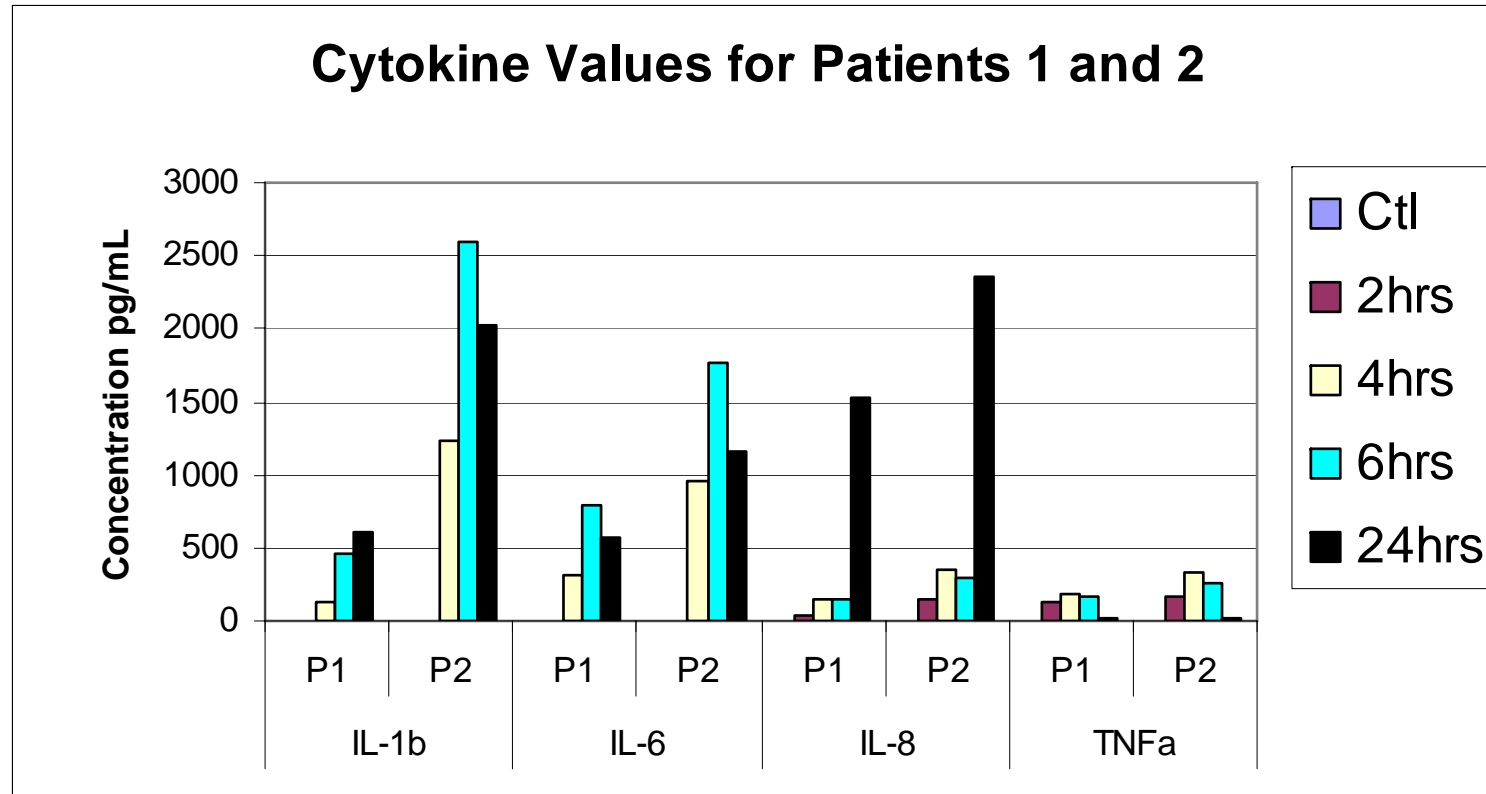


Figure 2. Antibody-coated microparticles are used in multiplexed cytokine assays. Whole blood samples collected into EDTA tubes were spiked with LPS at 0.5 $\mu\text{g/mL}$ and incubated for 2hrs, 4hrs, 6hrs and 24hrs at 37C. Samples were analyzed for cytokine content on a Luminex analyzer.

Affinity Capture with Recombinant Proteins

- Phospho-binding domains are alternatives to phosphospecific antibodies for affinity capture of phosphorylated proteins.
- High affinity (50 nM to 100 μ M) to specific sequences in a phosphorylation-dependent manner.
- Easy to clone and applicable in a variety of molecular techniques.
- Phosphoserine/threonine-binding domains, such as 14-3-3, WW, BRCT, Polo box, FHA, are particularly attractive, as no high-affinity and specific anti-phosphoserine and anti-phosphothreonine antibodies are available.



Advantages	Conformationally correct full-length recombinant proteins. High affinity antibodies that recognize native conformations.
Methodology	Immunized with full-length recombinant proteins. Polyclonal antibodies are affinity purified using recombinant antigens. Monoclonal antibodies are developed using standard hybridoma methods.
Monoclonal Polyclonal And Other	We offer both monoclonal and polyclonal antibodies. Stability and performance are guaranteed. Recombinant proteins also used as capture and detection reagents.
Throughput	Monoclonal antibodies – approximately 450 new targets per year. Polyclonal antibodies – approximately 450 new targets per year. Start of immunization to completion of purified antibodies takes 4-6 months.
Cost	Prices for purified antibodies vary depending on amount purchased. Also work with collaborators to develop antibodies to selected targets. May be no charge for development costs in these cases.
Verification	Usually tested in direct ELISA and western blotting against the recombinant immunogen and related recombinant proteins. Additional tests include western blotting against cell extracts, IHC, flow cytometry, IP, ELISA sandwiching, and neutralization of bioactivity.
Specificity Sensitivity	Tested using full-length recombinant proteins. Cross-reactivity with recombinant proteins from orthologs and paralogs are often tested. Testing against natural samples is also performed in many cases.